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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/527,762	03/11/2005	Joseph Duffy	21163P	3220				
210 MERCK AND CO., INC P O BOX 2000 RAHWAY, NJ 07065-0907	7590 02/08/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>LAMBKIN, DEBORAH C</td></tr></table>		EXAMINER	LAMBKIN, DEBORAH C		
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	02/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/527,762	Applicant(s) DUFFY ET AL.	
	Examiner Deborah C. Lambkin	Art Unit 1625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**DEBORAH C. LAMBEKIN**  
**PRIMARY EXAMINER**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is non-het, R1-R3, R7-R13 is non-het, R7-R12 do not form a het ring.

Group II, claim(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is non-het, R3 is pyridine, R1,R2, R7-R13 is non-het, R7-R12 do not form a ring.

Group III, claim(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is pyridine, R3 is non-het, R1,R2,R7-R13 is non-het, R7-R12 do not form a ring.

Group IV, claim(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is piperazine, R3 is non-het, R1, R2,R7-R13 is non-het, R7-R12 do not form a ring.

Group V, claim(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is pyrrole, R3 is non-het, R1, R2, R7-R13 is non-het, R7-R12 do not form a ring.

Group VI, claims(s) drawn to compounds, compositions and methods of use, wherein X is NR4, R4 is thiazole, R3 is non-het, R5-R13 is non-het, R7-R12 do not form a ring.

Group VII, claim(s) drawn to compounds, compositions and methods of use, wherein X is CR5CR6, R1-R3, R5-R13 is non-het, R7-R12 do not form a ring.

Group VIII, claim(s) drawn to compounds, compositions and methods of use, wherein X is CR5R6, R3 is pyridine, R1-R2, R5-R13 is non-het, R7-R12 do not form a ring.

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Group IX, claim(s) drawn to compounds, compositions and methods of use, wherein X is CR5R6, R3 is pyridine, R1,R2,R5-R13 is het, R7-R12 do not form a ring.

Group X, claim(s) drawn to compounds, compositions and methods of use, wherein X is CR5R6, R3 is pyridine, R1, R2, R5-R13 is het, R7-R12 form a ring.

Group XI, claim(s) drawn to compounds, compositions and methods of use, wherein the compounds do not fall into any of the above groups.

The inventions listed as Groups I-XI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

According to MPEP Section 1850 D, a Markush group must meet two criteria for unity of invention, i.e. (A) and (B) or (C). In the instant case, neither (B) or (C) is met since there is not a significant structural element, that is a large portion of the molecule or if the common portion is small it must be novel, which is neither the case here; or all the alternatives do not belong to a recognized class of chemical compounds (see benzothiophenes, pyridines etc.)

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: benzothiophenes, pyridines, piperazine, pyrroles, thiazoles.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic: claim 1 for example.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

They are vastly dissimilar structurally and belong to a different class of chemical compounds.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

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unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah C. Lambkin whose telephone number is 571-272-0698.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached at 571-272-0670.

DEBORAH C. LAMBKIN  
PRIMARY EXAMINER

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Deborah C. Lambkin  
Primary Patent Examiner  
Art Unit 1626